

Executive Summary

Deep-sea corals form large, complex structures in all U.S. regions, providing habitats for myriad marine species. The Deep Sea Coral Research and Technology Program is the nation's only federal research program dedicated to increasing scientific understanding of deep-sea coral ecosystems and is designed to provide ocean resource managers with scientific studies to inform conservation actions. Begun in 2009, and funded at \$2.5M annually in FY 2010 and 2011, the program focuses its resources on priority regions and targeted analyses to maximize its conservation impact while partnering with other programs and organizations to enhance cost-effectiveness.

In the 2010-2011 reporting period, the program completed a three-year field study off the southeastern United States. The study revealed deep-sea coral communities never before seen off the eastern and southern coasts of Florida. Protecting deep-sea coral habitats like these is important to the South Atlantic Fishery Management Council, which has authority for fisheries in federal waters off North Carolina, South Carolina, Georgia, and eastern Florida. The Council and its Coral Advisory Panel partnered with the program in planning and implementing the study, and the program's research findings will enable the Council to refine its coral protection actions while allowing sustainable fisheries to thrive. The program is currently analyzing the data and biological samples collected from the research cruises and will present the final results in 2012 to provide the best available science to the Council in a timely manner.

On the west coast, the program is contributing to the Pacific Fishery Management Council's work to review the designation of groundfish essential fish habitats—areas important to the survival and reproduction of commercially-caught, seafloor-dwelling fish—and management actions associated with these habitats.

To support this review, a coordinated suite of studies funded by the program brought forward new descriptions of where deep-sea coral communities are, how fish use them as habitat, and where interactions between fishing gear and corals could be reduced. As the Council considers ways to safeguard the habitats crucial to the region's fisheries, this knowledge is fundamental to effective conservation. Furthermore, the program's findings will be used by multiple National Marine Sanctuaries to refine sanctuary management actions.

In 2010 and 2011, the program began planning for three-year field studies in additional regions of the United States. The program's first research expedition in Alaska is scheduled to depart in 2012, and a northeast field study (Maine to Virginia) is slated to begin in 2013. To guide these regional research efforts, the program reached out to the fishing industry, the Regional Fishery Management Councils, state agencies, academia, and conservation groups to identify the key research topics that are important for making management decisions.

In spite of these recent efforts by the program and more than a decade of research by other partners, much about deep-sea coral ecosystems in the United States remains unknown. Even after three successful years of thoughtfully planned, intensive field research by the program and partners, most of the area managed by the South Atlantic Fishery Management Council is still unexplored. The South Atlantic Council has taken conservation action based on the available science and recognizes the need for further research, and it has encouraged NOAA to continue the deep-sea coral research. NOAA is committed to producing quality scientific information to support all Regional Fishery Management Councils and other ocean management initiatives.